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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/350,713	07/09/1999	JOSEPH B. KEJHA	JBK-7	8585
7	590 11/10/2004		EXAMINER	
JOSEPH B KEJHA			VANAMAN, FRANK BENNETT	
1022 FREDERICK ROAD MEADOWBROOK, PA 19046			ART UNIT	PAPER NUMBER
	,		3618	
		DATE MAILED: 11/10/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summer:	09/350,713	KEJHA, JOSEPH B.				
Office Action Summary	Examiner	Art Unit				
	Frank Vanaman	3618				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period vortices are reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed  s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 09 Se	eptember 2004.					
· · · · · · · · · · · · · · · · · · ·	action is non-final.					
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ⊠ Claim(s) 9-25,27 and 31-36 is/are pending in the 4a) Of the above claim(s) 12-25 is/are withdraw 5) ⊠ Claim(s) 9, 10, 11/9, 11/10, and 27 is/are allow 6) ⊠ Claim(s) 11/31, and 31-36 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or	vn from consideration. wed.					
Application Papers						
9)☐ The specification is objected to by the Examine	er.					
10) The drawing(s) filed on is/are: a) acce	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the		, ,				
Replacement drawing sheet(s) including the correct  11) The oath or declaration is objected to by the Ex	• • • • • • • • • • • • • • • • • • • •	•				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage				
Attachment(s)						
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)  Interview Summary Paper No(s)/Mail D					
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   Paper No(s)/Mail Date	_	Patent Application (PTO-152)				

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### **Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 9, 2004 has been entered.

#### **Status of Claims**

2. Applicant's amendment, filed with the request for Continued Examination has been entered in the application. Claims 9-25, 27, and 31-36 are pending. Claims 12-25 are withdrawn as being directed to a non-elected invention

### Claim Rejections - 35 USC § 112

3. Claims 31-36 and 11/31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In each of claims 31-36, the use of the phrase "which results in non-polluting, longer range vehicle than internal combustion-only hydrogen fueled vehicle" renders the claim scope indefinite, in that it is not clear whether or not the limitations associated with a hydrogen-only powered vehicle are required for the definition of applicant's invention, and if so, which specific limitations are required. As such, the phrase should be deleted.

# Claim Rejections - 35 USC § 103

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable, as best understood, over West (US 3,517,766) in view of Munday (US 5,143,025). West teaches a vehicle riding on 1-4 wheels, having a body, an internal combustion engine which is not sealed from the atmosphere, a pair of generators driven by the engine, a

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battery connected to the generators and motor, the electric motor connected to both the battery and generators, the motor for driving the vehicle, wherein the vehicle is further provided with a steering system. The reference of West fails to teach the engine as being powered by hydrogen, the hydrogen being obtained through the electrolysis of water from a generating cell, and not stored under pressure, the cell electrically connected to the generators and battery. Munday teaches a very low emission (col. 1, lines 1-31) vehicle engine (10) operated on a hydrogen fuel from hydrogen obtained from a hydrogen storage element (16) which directly feeds hydrogen generated by electrolysis of water in a cell (36, 40, note col. 3, lines 5-20), to the engine and does not store the hydrogen under pressure, the cell being electrically connected (58, 64) to a source of electricity. The engine arrangement taught by Munday includes at least one intake and exhaust port (12, 14, 18, 22, etc.) and wherein exhaust gases including water are returned to the intake to the breadth claimed, (through 38 and 16), through a connecting means (22), the gases having cooled through passage in connecting means 22. Note col. 4, lines 52-55, for example). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the engine and fuel source of the vehicle of West with a hydrogen engine and fuel supply as taught by Munday for the purpose of greatly reducing vehicle emissions, as specifically taught by Munday, resulting in a vehicle having a longer range, as best understood, than a vehicle lacking the electric drive train and thus lacking a means of regeneration.

The reference of Munday fails to specifically teach that the electric supply be from both a generator and a battery, however, in view of the vehicle of West featuring both a battery and a pair of generators, it would have been obvious to one of ordinary skill in the art at the time of the invention to allow selective connection of the generating cell of Munday to either electricity source (i.e., the battery and/or generators), for the purpose of allowing the cell to be operative under circumstances wherein one or the other of the sources is not in operation.

6. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable, as best understood, over West (US 3,517,766) in view of Munday (US 5,143,025) and Tangri

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(US 4,085,709). The references to West and Munday fail to specifically teach that the generating element may be connectable to an electric source external from the vehicle. Tangri teaches a hydrogen fuel system for a vehicle wherein an electrolyzer may be powered from an on-board DC power supply (e.g., 16) or an external AC source (through 24, 26). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the vehicle of West as modified by Munday with a connection to an external electrical power source so as to allow operation of the electrolyzer from residential current, for example when the vehicle is parked at a user's residence, thus not needlessly draining the on-board supply.

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# Allowable subject matter

- 7. Claims 9, 10, 11/9, 11/10, and 27 are allowed.
- 8. Claims 31 and 32 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
- 9. Claim 11/31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### **Response to Comments**

10. Applicant's comments have been carefully considered. As regards applicant's comments to the secondary considerations set forth in the letter from 2003, the examiner notes that these comments are conclusory and contain no evidence to support the conclusions set forth therein, furthermore it is noted that a reference to material in a secondary document is not evidence of support in applicant's own originally filed specification. As regards the reference to Laumann and the return of exhaust gases including water to the intake, the examiner agrees that Laumann does not clearly teach such a limitation, although the reference to Munday does teach such a limitation to the breadth it is currently claimed—namely that the exhaust connects to the cell and storage device, and as such, constitutes a re-circulation to the breadth applicant has actually recited such in the claims.

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### Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 703-308-0424. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is 703-308-1113.

As of May 1, 2003, any response to this action should be mailed to:

Mail Stop \_\_\_\_\_ Commissioner for Patents P. O. Box 1450

Alexandria, VA 22313-1450,

Or faxed to one of the following fax servers:

Regular Communications/Amendments: 703-872-9326

After Final Amendments: 703-872-9327

Customer Service Communications: 703-872-9325

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

F. VANAMAN Primary Examiner Art Unit 3618